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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,476	01/20/2006	Akinari Nakamura	601560-22US(04P567US/P351	2073
52092 7590 09/21/2007 AKIN GUMP STRAUSS HAUER & FELD LLP PANASONIC ONE COMMERCE SQUARE 2005 MARKET STREET SUITE 2200 PHILADELPHIA, PA 19103			EXAMINER GARLAND, STEVEN R	
			ART UNIT 2125	PAPER NUMBER
			MAIL DATE 09/21/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/565,476

**Applicant(s)**

NAKAMURA ET AL.

**Examiner**

Steven R. Garland

**Art Unit**

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10/6/06, 1/20/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-9,11,15 and 16 is/are rejected.
- 7) ☒ Claim(s) 2-4,10,12-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/20/06</u> .   | 6) <input type="checkbox"/> Other: _____                          |

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### DETAILED ACTION

1. Claims 1-16 are pending.
2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
3. Claims 1 and 8 are objected to because of the following informalities: claim 1, line 8, "the stop" should be --a stop--. Claim 8, line has a similar problem. Appropriate correction is required.
4. Applicant cannot rely upon the foreign priority papers to overcome a rejection based on Akihito Japanese document 2004-103397 because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.
5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1,5-9,11, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akihito Japanese document 2004-103397 ( now with translation but previously cited by applicant).

Akihito teaches a fuel cell 4 system for generating power having load power detection means 8 and stopping operation based on the detected load power and a time. Akihito also teaches the use of a learned pattern of usage, use of seasons, use of family size, average power, etc. to control power stoppage. Akihito expressly states that the conditions of the stopping conditions can be freely varied (paragraphs 0011,0012). See the abstract; figures; in the translation see claims 3-7 and paragraphs 0008,0010-0012; 0018-0021, and 0022 on.

Akihito however does not expressly show the use of plural conditions for different time periods to control stopping of power generation, but as noted above does suggest the use of various conditions to control stopping power generation in different time periods.

It would have been obvious to one of ordinary skill in the art to modify Akihito to use different stop conditions during different time periods in view of the teachings of Akihito.

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akihito Japanese document 2004-103397 as applied to claims 1,5-9,11, and 16 above, and further in view of Ueda et al. WO02/29953 corresponding to U.S. 6,904,337.

Akihito teaches a fuel cell 4 system for generating power having load power detection means 8 and stopping operation based on the detected load power and a time. Akihito also teaches the use of a learned pattern of usage, use of seasons, use of family size, average power, etc. to control power stoppage. Akihito expressly states that the conditions of the stopping conditions can be freely varied (paragraphs 0011,0012). See the abstract; figures; in the translation see claims 3-7 and paragraphs 0008,0010-0012; 0018-0021, and 0022 on.

Akihito however does not expressly show the use of plural conditions for different time periods to control stopping of power generation, but as noted above does suggest the use of various conditions to control stopping power generation in different time periods.

It would have been obvious to one of ordinary skill in the art to modify Akihito to use different stop conditions during different time periods in view of the teachings of Akihito.

Akihito does not teach the claimed details of the fuel cell.

Ueda teaches a fuel cell which has a reformer and uses hydrogen and air for the process. See col. 10, lines 2-43; col. 11, lines 40-51 and the figures. Note U.S. patent 6,904,337 is being used as a translation of the published corresponding International application WO02/29953.

It would have been obvious to one of ordinary skill in the art to modify Akihito in view of Ueda and use hydrogen and air for the fuel cell process and allow a commonly available fuel cell to be used to produce the power.

9. Claims 1,5,6,8,9,11,15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. WO02/29953 corresponding to U.S. 6,904,337 in views of Crook 5,561,330.

Note U.S. patent 6,904,337 is being used as a translation of the published corresponding International application WO02/29953.

Ueda et al. teaches the use of a fuel cell system in which the load power is detected and then stopped based on the detected load power ( figs. 1-7). Ueda however does not go into details about how combination of time and load are determined which control the stopping. See the abstract; figures 1-7; col. 9, line 65 to col. 16, line 37. Ueda also teaches a fuel cell which has a reformer and uses hydrogen and air for the process. See col. 10, lines 2-43; col. 11, lines 40-51 and the figures.

Crook teaches the use of an adjustable time period based on user selection and anticipated load or operator action to control stopping and also teaches sensing the load. See the abstract; figures; col. 2, lines 41-63; col. 3, lines 38-50; col. 5, lines 21-25; and the claims.

It would have been obvious to one of ordinary skill in the art to modify Ueda in view of Crook and make the predetermined time adjustable to allow different types of loads to be used with the time of stopping based on the load. This would allow

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adjusting the device so that it would function properly based on the user requirements and the load. For example this would allow using the device to power various types of load and control the generated power based on whether a high power demand load is being used in one period of time and then a small power demand device is used in another time period.

10. Claims 2-4, 10, and 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven R. Garland whose telephone number is 571-272-3741. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



KIDEST BAHTA  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2100

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*SRL*

Steven R Garland  
Examiner  
Art Unit 2125

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